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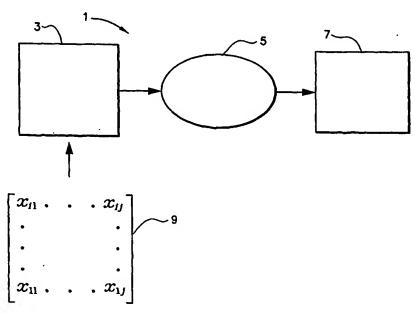(74) Agent: GRIFFITH HACK; GPO Box 4164, SYDNEY, New South Wales 2001 (AU).

(54) Title: A METHOD AND SYSTEM FOR SELECTING ONE OR MORE VARIABLES FOR USE WITH A STATISTICAL MODEL

$$\begin{bmatrix} x_{i1} & \cdots & x_{ij} \\ \cdot & & \cdot \\ \cdot & & \cdot \\ \cdot & & \cdot \\ x_{11} & \cdots & x_{1j} \end{bmatrix}$$

(57) Abstract: A method of selecting one or more variables for use with a statistical model, the method comprising the steps of: creating a plurality of unique subsets of variables of multivariate data; determining the performance of a discriminant rule when used with each of the subsets, the discriminant rule being based on multivariate normal class densities each having substantially diagonal covariance matrices; and selecting the one or more variables from at least one of the subsets that result in a desired performance of the discriminant rule.